

NATIONAL INTELLIGENCER.

WHAT ARE PRUSSIA AND GERMANY DOING?

These Powers, in common with the greater part of the nations of Europe, are cultivating the arts of peace: are obtaining a knowledge of their mineral, agricultural, manufacturing, and commercial resources; are encouraging the arts and sciences, are developing mechanical skill and useful inventions by rewards and premiums; are extending education among the mass of the people; are encouraging industry, fostering genius, and promoting human happiness by all the means which enlightened philanthropy, liberal policy, and rapidly improving views of the duties which the ruling few owe to the ruled many, can dictate.

France, Great Britain, Germany, Prussia, Russia, Holland, Belgium, Denmark, and Sweden are engaged in this good work. But our present inquiry concerns Prussia and Germany, or that portion of the latter, which, with Prussia, form the Zoll-Verein (or Zoll and Customs Union) and which includes the whole of the Germany of the Geographical, with the exception of Austria, Oldenburg, Holstein, Hamburg, Mecklenburg, Schwerin and Strelitz, Hanover, Bremen and Lubeck.

The Zoll-Verein sprang from small beginnings. In 1826, the Thuringian, with one or two other States, formed a *Mittel Verein*, and shortly afterwards Bavaria and Württemberg joined in a further *Verein*. It was not until 1833 that the actual Zoll-Verein was formed, under the auspices of Prussia, when the two pre-existing Unions became merged in it; and by subsequent additions it now consists of thirteen different States, including all Germany, with the above mentioned exceptions. The population of the States of Germany included in the Zoll-Verein is about 28,000,000; that of those which have not yet joined it, about 48,000,000.

It is true that the principle of the Zoll-Verein had its origin in the celebrated Prussian Ordinance of 26th May, 1818, which had reference to the duty on foreign goods, and also to the trade of the interior; but as an institution having an important bearing upon the commerce of other nations it had no existence until 1833. The great effect which this institution has produced in the twelve years during which it has been in operation could not have been anticipated. It has probably more than realized the expectations of the financier, the agriculturist, the merchant, the manufacturer, and the politician.

"But," says the Westminster Reviewer, "all the different motives of these various classes, powerful as each in itself might be, would have scarcely sufficed to consolidate the Zoll-Verein upon its actual basis, without the impetus of that strong desire which was manifested by the bulk of the people of the contracting States to possess emphatically a tangible German nationality, an object they fully expected to see realized through the fusion of their scattered commercial and financial interests. That, in reality, the Zoll-Verein mainly owes its existence to this state of feeling, which Prussia, for her own political objects, ably turned to account, rather than to any other single predominating cause, how ostensibly soever placed in the foreground, is a fact which all must acknowledge who have mixed among the people of the Zoll-Verein States; whilst by such it will be equally admitted that in all which concerns the moral, social, and political condition of Germany, the Zoll-Verein has so far been an instrument of good: in a word, has been the means of operating a moral regeneration of the land. If we take, in illustration, the single case of railroads, we shall find these to be far more developed in the States which belong to the Zoll-Verein than in those which do not; and other instances might be readily adduced."

It is necessary to discriminate between the Zoll-Verein simply as a union of States, and that which emanates from that Union, the Zoll-Verein tariff for instance. The former supplied a want of the German people; it suited their condition, and has hitherto worked well: this is admitted by all parties. The latter (the tariff) will be judged favorably or not, according to the commercial creed of those who pass judgment upon it. The Westminster Reviewer argues the question as between Germany and Great Britain, and, being an advocate of free trade, there is no wonder, that whilst he considers the Tariff to have been adopted as well "in retaliation against England" for her restrictive policy, "as for the protection of the national industry," he arrives at the conclusion that the measure will not be found ultimately conducive to the welfare and happiness of the Zoll-Verein States. At the same time he admits that the hostile commercial character of the Zoll-Verein tariff may cause to England the loss of the future German market, and the competition of German manufactures in foreign markets. The reviewer adds "that many of the statesmen and politicians of Germany are favorable to free trade principles, but that their wishes are overborne by the morbid state of public feeling existing in the manufacturing districts by the writings of Dr. List, the champion of the protective system." We shall not enter into the discussion of this question in this place.

If we glance at other evidences of the commercial development of the Zoll-Verein, betokening at least the activity of its administration, we shall find the by-gone year to have been fertile in Berlin with incidents of commercial magnitude and importance. These are:

1. The negotiation of a commercial treaty between the Zoll-Verein and the United States.
2. The opening of the exhibition of national industry at Berlin.
3. The constitution of a board of trade.
4. The return of a commission sent out by the Prince of Prussia to explore the Mosquito country in Central America, with the view of German colonization.
5. The conclusion of a treaty of navigation and commerce between the Zoll-Verein and Belgium.
6. The opening of commercial negotiations with Brazil and Holland, and the despatch of a commercial mission to China.

As regards the first of these, the treaty with the United States, its history is too well known to our readers to need any notice from us. This is not the place nor the time to discuss the policy which dictated its negotiation, or the causes which led to its being laid on the table by the Senate.

The *Geschie-Ausstellung*, or exhibition of national industry, at Berlin, which has lately been closed, furnished conclusive evidence that Germany has made immense strides as a manufacturing country, and that she has abundant reason to congratulate herself on the skill and industry of her people. The exhibition took place in the magnificent arsenal at Berlin. The specimens of machinery of various sorts and kinds were in general well manufactured, without displaying much novelty. The most conspicuous was a beautifully finished locomotive and tender, of powerful dimensions, from the foundry of Messrs. Borsig & Co., situated just without the walls of Berlin, constructed entirely by Germans. This factory employs upwards of 600 hands, all Germans; consumes annually about 30,000 tons of iron, (chiefly English), and is conducted with the greatest vigor and success. There are several other establishments of the same kind in the country. Of the other chief articles, the most noticeable, perhaps, were Saxony cloths, Rhinish silks, &c., and Silesian linens, of all of which the display was considerable. The cotton and mixed cotton and woolen goods were far enough specimens, showing signs of progress. The cutlery was inferior when compared with English, but there were various kinds of iron and other metal wares well entitled to commendation. Of gold and silver wares, many of them being elaborately finished, and

entitled to much praise, both for taste and workmanship.

"That the effect of this exhibition upon the German people," says the reviewer, "was well from its novelty and nature as from the official parade attending it, should have been of an exciting kind, was only natural; whilst, considered apart from the question of its real utility, and under the political point of view alone of tending to strengthen the bond of national feeling which the Zoll-Verein was the great instrument of first effectually cementing, it has wonderfully fulfilled the expectations that were entertained of it by the rulers of the Zoll-Verein States."

One of the first fruits of the enthusiasm thus created has been the formation at Berlin of an association called *The Central Union, for the well-being of the working class*; to the funds of which the King has contributed a donation of \$15,000, (Prussian), or about \$10,000 United States currency. The objects of this union are to minister to the wants, physical and moral, of the workpeople in factories, and other laborers, by the establishment of savings banks, the awarding of premiums, the formation of schools, and the propagation of useful publications.

The constitution of a Board of Trade has long been a favorite object with the Prussian Government, and its actual establishment, though avowedly for the service of the Prussian Government, must be regarded as a Zoll-Verein measure. The President of this Board, M. de ROENNE, is well and advantageously known in this country as the formerly resident Minister from Prussia to the United States. The acquisition of colonies has long been a favorite object with the States forming the Zoll-Verein confederacy. A commission was sent to explore the Mosquito country in Central America; it has returned, but the report has not yet been published. The enterprise is to be a national one, under the auspices of the Zoll-Verein.

That emigration is a want of Germany, every day's experience tends to prove. A printed circular, dated October, 1844, shows that the number of individuals who, on the average of the last few years, annually migrate from Germany (chiefly to the United States) is about 30,000, and that they carry with them, at the least, a capital of five millions of Prussian dollars, (or three millions and one-third United States currency.) It further shows that the emigrants from Prussia alone for the five years from 1835 to 1839 amounted to 24,500, with a capital of seven millions of florins, or three millions of dollars in the currency of the United States. Germans are admitted to be among the best of emigrants, rendered so by their patient, sober, steady, and economical habits.

The treaty between the Zoll-Verein and Belgium, which was negotiated on the part of the former by M. de ROENNE, is considered the greatest stroke of policy the Zoll-Verein has yet achieved. Its principal and prominent feature consists in the stipulation which converts, for all practical purposes, the Belgian seaports into seaports of the Zoll-Verein, giving the latter, through its own shipping, direct commercial intercourse with transatlantic countries. The latest news from Europe shows that France is dissatisfied with this treaty, and advances Belgium of having conceded to the Zoll-Verein advantages to which she (France) was exclusively entitled, and for which she had paid a stipulated price in the terms of her existing treaties with Belgium. We know nothing of the progress of the commercial negotiations between the Zoll-Verein and Brazil and Holland, nor of the success of the commercial mission to China. A more important mission than either is the visit of M. de ROENNE to Hamburg and the adjacent free cities, with a view to bring about the accession of the HANSE-TOWNS to the Zoll-Verein. This would be a measure fraught with most important consequences to the commerce and manufactures of England, and the English journals say that few things would inflict a heavier blow upon their commercial welfare than the accession of Hamburg to the Zoll-Verein, in the actual state of the Zoll-Verein tariff. It is said that nine-tenths of the whole British trade with Germany, as comprised under the general head of "Germany" in the British Parliamentary returns, takes place through the ports of Hamburg and Altona. Dr. SOETTER, in his report on the commerce of Hamburg, says:

"According to the money-value, Hamburg takes the 'most important place for England after the United States of North America.' Hamburg imports from England more than twice as much as all France." In his opinion, "it is Hamburg's vocation to remain a German seaport, and, as such, a cosmopolitan commercial city." "Even in the event of the extension of the Zoll-Verein to the shores of the North Sea, the well-understood interests of Germany require that Hamburg should remain a free port, and a neutral commercial republic." Late German newspapers state that a party, not as yet numerous, but likely to increase, has commenced getting up meetings in Hamburg in favor of an annexation with the Zoll-Verein.

Such is our reply to the question, "What is Prussia and Germany doing?" We have shown that a spirit of inquiry and of enterprise is wide awake in them, and we bid them "God speed" in every undertaking which is founded on right and carried forward with justice.

FRENCH TRANSATLANTIC STEAM-PACKETS.
A report has been lately presented to the French Chambers, by the Minister of Marine and the Colonies, explanatory of the delays which had occurred in the establishment of the lines of transatlantic steamboats ordered by the law of July 16, 1840. The information reported by the commission of the Chamber, demonstrated the necessity of modifying the routes established by the law. These modifications will be made as soon as the Government shall be charged definitively with the service, or when it shall be decided to transfer the direction to a commercial agency.

The new project is limited to the establishment of these points of arrival: Rio Janeiro, Martinique or Guadalupe, Havana, and New York. The points of departure from France are designed, because it is probable that propositions may be made for the same lines to depart from different ports, and it is wished to reserve them to be designated in the manner which shall be most advantageous to the treasury. Companies who may offer to contract for the lines will be free to act according to their choice.

There will be four lines of three independent lines. Proposals have already been made by a company for one going directly to Havana. According to the law of 1840, this line was to be dependent on that of Martinique. As to the line to the West Indies, the contractors will be left to choose between Guadalupe and Martinique.

If, contrary to expectation, companies do not offer satisfactory terms to contract for the formation of commercial lines, the enterprise will be undertaken on account of the Government. In that case the line to Martinique will have but one point of departure, viz. Bordeaux. The number of voyages annually will also in that case be reduced to twelve instead of eighteen from Bordeaux to Martinique.—*Boston Daily Advertiser*.

EMIGRATION FROM EUROPE TO AMERICA.—The late arrivals from Liverpool have brought to the Eastern seaboard large numbers of immigrants, and many of them will prove useful citizens to their adopted country. One ship arrived at Boston week before last with seventy families, who were sent out bound for Wisconsin, by a society in England, which has been formed in this way: Every man having a family and paying to the society one shilling a week is entitled to membership. An agent resides in Wisconsin, who receives from time to time the funds, and as often as they amount to \$100 he buys eighty acres of land, builds there a log house, and fences five acres, which are planted.

The society are sending out families to take possession as fast as the funds enable the agent to prepare the houses and lands. When the families arrive, each finds his house and eighty acres in readiness for his reception. The agent furnishes him in addition with \$50 for the purchase of tools, &c., for all of which the society receive a yearly rent of \$25 for ten years, at the end of which the tenant is entitled to the full of the land, with all the improvements, stock, &c., making himself and family independent for life. This society have made their arrangements with Hadden & Co., to take their immigrants in Europe and land them at their own doors in Wisconsin—which protects them from all delay and imposition, and relieves them from all care and trouble about Custom-house arrangements. These are merely the pioneers of those who have made arrangements to come hereafter. [New York Commercial Advertiser.]

CHESAPEAKE AND OHIO CANAL.

General Meeting of the Stockholders of the Chesapeake and Ohio Canal Company.

A General Meeting of the Stockholders of the Chesapeake and Ohio Canal Company, duly convened agreeably to the charter of said Company, was held on the 29th of April, 1845, at the office of said Company, in the city of Frederick, to take into consideration the expediency of accepting an act of the Legislature of Maryland, passed at its recent session, entitled "An act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland and for other purposes;" and also an act entitled "An act further to amend the act incorporating the Chesapeake and Ohio Canal Company," passed by the Legislature of Virginia on the 20th day of January, 1844, confirmed by the Legislature of Maryland by an act passed the 8th February, 1844, and assented to by the Congress of the United States during the session just closed.

On motion, Governor SAMUEL SPRIGG, of Maryland, was called to the Chair, and THOMAS TURNER was appointed Secretary.

The list of Stockholders having been called over, on motion, the Chairman appointed Messrs. Ingle, Van Lear, and Washington a committee to examine the various proxies, and report thereon.

The said committee, having performed the duty assigned them, reported the following Stockholders to be duly and regularly represented in this meeting, viz:

The United States—By Col. J. J. Albert.
The State of Maryland—By Governor Samuel Sprigg, Allen B. Davis, John Van Lear, and Wm. T. Goldborough, Esquires, State Agents.
The State of Virginia—By James L. Ransom, Esq., *The Corporation of Washington*—By W. W. Seaton and Lewis Johnson, Esqrs.
The Corporation of Georgetown—By Wm. S. Nichols, Samuel McKenney, and Evan Lyons, Esqrs.
The Corporation of Alexandria—By Phineas Jamny, Robert H. Miller, and Wm. H. Fowle, Esqrs.

In addition to the above, there were several individual stockholders represented by proxy, and numerous stockholders personally present; in all, constituting the representation of a large majority of the stock of said Company.

JAMES M. COALE, Esq., the President of the Company, on behalf of the President and Directors, presented and read a report to the meeting in regard to the objects for which it was convened.

After which, he presented and laid before the meeting authenticated copies of the following acts, viz:

An act entitled "An act to amend the act incorporating the Chesapeake and Ohio Canal Company," passed by the Legislature of Virginia on the 20th day of January, 1844.

An act entitled "An act to confirm an act of the General Assembly of the State of Virginia," &c., passed by the Legislature of Maryland on the 8th February, 1844.

An act entitled "An act confirming and assenting to an act of the Legislature of Virginia," &c., passed by the Congress of the United States, and approved by the President on the 7th day of February, 1845.

Also, an act of the Legislature of Maryland, entitled "An act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland, and for other purposes."

Whereupon, J. VAN LEAR, Esq., submitted the following resolution:

Resolved by the Stockholders of the Chesapeake and Ohio Canal Company in General Meeting assembled, That the act entitled "An act further to amend the act incorporating the Chesapeake and Ohio Canal Company," which was passed by the Legislature of Virginia on the 20th day of January, 1844, confirmed by the Legislature of Maryland on the 8th day of February, 1844, and assented to by the Congress of the United States, approved by the President on the 7th day of February, 1845, be and the same is hereby accepted and assented to, and declared to be in full force as a part of the charter of this Company.

The question being taken, the above resolution was unanimously adopted.

JAMES L. RANSOM, Esq., then offered the following:

Resolved by the Stockholders of the Chesapeake and Ohio Canal Company in General Meeting duly assembled, That the provisions of the act entitled "An act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland and for other purposes," passed by the Legislature of Maryland on the 8th day of February, 1844, chapter 282, be and the same are hereby approved, assented, and agreed to; and that such approval, assent, and agreement, under the corporate seal and the signature of the President of this Company, be communicated to the Treasurer of the Western Shore of said State, in conformity with the 9th section of the said act.

Resolved, That a further mortgage to the State of Maryland be executed by this Company, and delivered to the Treasurer of the Western Shore of said State, on the canal, its lands, tolls, and revenues, subject to the liens and claims of the State, made, created, or authorized by the said act of 1844, chapter 282, as an additional security for the payment of the loan made by the said State to this Company, under the act of December session, 1834, ch. 241, and the interest due and in arrears, and which may hereafter accrue thereon, in compliance with the 7th section of the first mentioned act of 1844, chapter 282.

The said resolutions were read; and, the question having been taken, they were unanimously adopted.

The meeting then, on motion, was adjourned sine die.

SAMUEL SPRIGG, Chairman.
THOMAS TURNER, Secretary.

REPORT OF THE PRESIDENT AND DIRECTORS TO THE STOCKHOLDERS.

OFFICE OF THE CHESAPEAKE AND OHIO CANAL CO.
FREDERICK, APRIL 29, 1845.

To the Stockholders of the Chesapeake and Ohio Canal Company, in general meeting assembled:

GENTLEMEN: Pursuant to the charter of the Chesapeake and Ohio Canal Company, we have called you together on the present occasion to submit to your consideration two several enactments which have received all the sanctions required from legislative authority, and only await your assent and acceptance to become fixed laws.

The first is an act amendatory of the charter of this Company, entitled "An act further to amend the act incorporating the Chesapeake and Ohio Canal Company," which was passed by the Legislature of Virginia on the 20th day of January, 1844, confirmed by the Legislature of Maryland on the 8th day of February, of the same year, and assented to by the Congress of the United States and approved by the President on the 7th day of February, 1845.

The second is a simple legislative enactment, entitled "An act to provide for the completion of the Chesapeake and Ohio Canal to Cumberland, and for other purposes," passed by the Legislature of Maryland on the 10th day of March, 1845.

The reasons and motives that actuated the Board in making application for the amendment to the charter of the Company, above referred to, will be seen by reference to their memorial to the Legislature of Virginia, a copy of which will be found in the appendix, No. 1; and the importance of the amendment to the interests and well-being of the Company will be readily appreciated by an examination of the law itself.

Its leading provisions are an enlargement and extension of the time allowed for the completion of the canal to Cumberland, which, without this amendment, would long since have expired, and left the Company at the mercy of the sovereigns that created it; and an express authority conferred on the President and Directors, or a majority of them assembled, to borrow money from time to time to carry into effect the objects authorized by the charter of the Company, to issue bonds or other evidences of such loans, and to pledge the property and revenues of the Company for the payment of the same and the interest to accrue thereon, in such form and to such extent as they may deem expedient, with a proviso saving the prior rights or liens of the State of Maryland under the mortgages heretofore executed by this Company to said State, except in so far as the same may be waived, deferred, or postponed by the Legislature thereof.

The object of this proviso was to secure the assent of the Legislature of Maryland to the general provisions of the law. If the act had not contained the clause referred to, it could never have received the confirmation of the Maryland Legislature, inasmuch as such confirmation, without it or an equivalent provision, might have been construed into an general waiver of the State's claims to an indefinite amount, and for all purposes authorized by the charter of the Company. Under the law as it now stands, however, whatever rights the State of Maryland may have by virtue of her mortgages remain good, except in so far as they may be waived by her legislative authority.

By obtaining this important amendment to the charter, this Company was once more placed upon solid grounds, and new life was infused into its corporate existence. The time allowed

for the completion of the canal to Cumberland, which, under a strict construction of the original charter, expired in September, 1840, is by it extended to the 1st day of July, 1855. All rights, privileges, or advantages dependent upon the completion of the work to that point within the time originally prescribed, if it shall be finished within the enlarged time now allowed, are reaffirmed and legally secured, and power to the President and Directors to borrow money for the general purposes of the Company, and to pledge its property and revenues for the payment of the same and the interest to accrue thereon, is plainly and expressly given.

We regard this law as of the highest importance, and respectfully recommend that it be accepted and assented to by the stockholders, so as to make it a part of the charter of the Company.

Important and necessary, however, as, under existing circumstances, are the powers and authority granted by the charter amendment of which we have just spoken, this Company would still have been compelled to remain stationary and incapable of any progressive movement towards the completion of the great work we have in charge, without the further action of the Legislature of Maryland providing for a waiver of her liens. This, after a long, earnest, and persevering effort, we have the gratification to inform you we have likewise obtained by the passage of the second act referred to in the commencement of this communication. Although there are some parts of this law which may be regarded as vexatious and exacting, yet we feel assured that, by the generous and co-operation of the friends of the canal, and by the exercise of the same prudence and perseverance which has enabled us to overcome the obstacles hitherto thrown in our path, all present difficulties may be surmounted, and the provisions and objects of the law fully complied with and fulfilled. We, therefore, in like manner, respectfully commend it to the acceptance of the stockholders.

It will be seen, by reference to the ninth section, that the act is not to take effect until it is accepted by this company, and such acceptance is duly communicated to the Treasurer of the Western Shore of Maryland. Up to this time, consequently, the Board could take no definitive measures for complying with its provisions; but, in anticipation of the favorable action of the stockholders, we have, ever since the adjournment of the Legislature, been actively engaged in making arrangements to have its requirements fulfilled, and are flattered with the belief that at a very early date after the law receives your sanction its preliminary conditions will be satisfied.

When the clause requiring a guaranty for the through transportation of not less than one hundred and ninety-five thousand tons of tonnage per year for five years, dating from the end of six months next after the completion of the canal to Cumberland, was inserted in the bill, apprehensions were entertained that the requirement might prove fatal to its availability, inasmuch as individuals and private corporations are seldom known to assume upon themselves responsibilities that are to ensure to the common benefit; but the enthusiasm with which the measure has been received by the stockholders of the incorporated companies of Allegheny county, by the people of the Potomac counties of Maryland and Virginia, and by the citizens of the District cities, has dissipated all doubt and apprehension on this subject.

It is now sufficiently ascertained that the guaranties will be given, and securely given, and this clause of apprehended weakness will then be converted into a source of strength. The guaranty will not only operate as a sort of collateral security for the bonds that may be issued for the completion of the work, but, being executed for small amounts by numerous responsible parties, making, in the aggregate, a quantity stipulated for in the law, they will bind by the strong motive of self-protection nearly every important trader at each extremity, and along the line of the canal to the canal itself, and induce all to take a lively and active part in augmenting its trade. In this way the Chesapeake and Ohio Canal, which is already so highly appreciated by all who are within the range of its operations, will acquire additional claims to the popular favor and support.

After the guaranties are executed and approved by the Governor of this State, and the agents representing the State in this Company or a majority of them, the board will then be empowered to avail themselves of the operative provisions of the law, and to issue the bonds of the Company for the completion of or raising the means to complete the canal to Cumberland.

According to the provisions of the law, the Board of President and Directors are invested with the discretion either to borrow money on the bonds of the Company at their par value, and make contracts to have the work done, payable in cash, or, with the approval of the State agents, to enter into a contract or contracts to have it executed and paid for directly in the bonds secured in the manner therein provided for.

Which plan it may be most expedient to adopt is a matter for consideration, and unless the stockholders formally indicate a preference, the board will be governed by circumstances, and, after consultation with the authorities above mentioned, pursue such course as in their judgments may be most conducive to the general interests of the Company, keeping in view the completion of the canal at the earliest practicable period as an object of primary importance. It would certainly be more desirable for the Company to raise the money themselves, and pay for the work in cash, if a loan can be readily obtained, as by that means the field of competition among contractors would be greatly enlarged, and the only consideration that at present could have any weight with the Company in favor of letting out the work to be paid for bonds, is the saving of the time that otherwise must necessarily be consumed to perfect a negotiation. But whether this consideration should be allowed to prevail, must depend materially on the character of the bid, and the responsibility of the parties who may offer to contract for bonds in case any such proposals should be offered. No such contract certainly will be entered into, unless the parties can demonstrate to the satisfaction of the board that they have ample means or resources, or have made such arrangements as to leave no doubt of their ability to finish the work within the time that may be prescribed, which will not exceed two years from the commencement of operations.

Whether, however, the work be completed by contractors who can command the means and will receive the bonds in payment, or whether the Board are first to raise the money on the bonds from capitalists and pay for the work in cash, it is very manifest that the security given will be so abundant as to render the investment one of the best of which we have any knowledge. By force of the law and its acceptance by this Company, the bonds will be preferred, and absolute statutory liens on the entire revenues of the Company, fortified by guaranties of an annual tonnage for the first five years greatly more than is necessary to yield a sum sufficient to pay the interest and the annual appropriation to, the sinking fund provided by the act. The margin allowed over and above the amount necessary for the completion of the canal and the payment of the necessary expenses accruing thereon, will be applied to the payment of the interest on the actual outlay until the work is finished, and after that period the revenues of the Company will be an unfailing and constantly increasing source for that purpose, and the providing an adequate sinking fund to discharge the principal of the bonds when they become due, according to the requirements of the law.

It may be proper, in this connection, to give a brief description of the Chesapeake and Ohio Canal, its dimensions, present cost, capacity, and the sources of its expected trade, in order that the strength of the security upon which the bonds are to be based, may be justly appreciated.

THE CANAL.

The Chesapeake and Ohio Canal, with the terminus at present contemplated, extends from Georgetown, in the District of Columbia, to the town of Cumberland, in Allegheny county, Maryland, a distance of 184½ miles. About five miles of the canal is within the District; the entire residue of the line is within the State of Maryland. Of the entire line 134½ miles, extending from Georgetown to Dam No. 6, are finished and navigable, and the trails thereon are steadily increasing. Thirty-one and seven-tenths of the work on the remaining fifty miles have already been executed, at a cost of \$2,892,000, and there only remains eighteen and three-tenths miles of the work to be done to complete the canal and open a through navigation from the tide-water of the Potomac to Cumberland. The amount required to finish these eighteen and three-tenths miles, according to a detailed estimate made by the Chief Engineer in 1842, was \$1,645,000. That estimate was made in reference to the cost of the work which had been done, at a time when provisions were high and labor scarce. Now, however, provisions are low and labor is abundant, and these advantages must necessarily enure to the benefit of the Company.

DIMENSIONS AND COST.

The depth of the Chesapeake and Ohio Canal is six feet throughout, but its transverse sections vary. From Georgetown to Harper's Ferry, a distance of sixty miles, it is 60 feet wide at the top, and forty-two feet at the bottom. From Harper's Ferry to Dam No. 5, (47 miles,) the top width is 50 feet and bottom width 32 feet. From Dam No. 5 to Cumberland, (77½ miles,) the top width is 54 feet, bottom width 30 feet. The basin of the Canal at Cumberland is 609 feet above the level of tide-water at Georgetown. This ascent is overcome by one tide and seventy-five lift locks, averaging about eight feet lift. The locks, so far as the work has been finished, are constructed in the most durable manner, of solid masonry, and each has a chamber of one hundred feet long and fifteen feet wide in the clear. They are constructed with a view to a double lockage, whenever the exigencies of the Company may require it; but, as we shall presently show, the capacity of the canal, with single locks, as at present, is fully equal to the accommodation of a trade sufficient to gratify the most extravagant desires of its supporters. The sheer cost of the canal up to this time is as follows:

For the acquisition of lands.....\$402,913 94
For the Engineer department.....358,951 04
For construction.....9,013,837 56
Total.....\$9,775,702 54

CAPACITY.

When the canal shall be finished and filled to its capacity, boats carrying 100 tons of tonnage may navigate its entire length with ease. In consequence of the mildness of the latitude in which it is located, it has heretofore seldom been closed by ice for more than six weeks in the year, which generally happens in January and February; and, in this respect, it consequently possesses great advantages over the Northern canals, whose navigation is usually suspended for four or five months annually. It is scarcely necessary to go into an estimate of the annual amount of tonnage that might be transported on a work of this description; but, as the calculation is before us, we will here transcribe its results.

Several years ago the Chief Engineer of this Company made two estimates, founded upon data furnished by the experience of fourteen years' on the Erie Canal in New York. The one was based on the greatest month's work, and the other on the number of boats which, in the opinion of several of the officers of that canal, could conveniently be passed each day. Assuming the capacity of boats on the Chesapeake and Ohio Canal at only eighty tons, according to the first calculation the amount of tonnage capable of being transported on it during a navigable year was shown to be, in both directions, with single locks, as at present, 3,264,000 tons, and with double locks, 10,000,000 tons per annum. With a large allowance, therefore, for the usual discrepancy between theoretical calculations and practical results, it is very manifest that many years must elapse before the full capacity of the Chesapeake and Ohio Canal, with single locks, can be tested by actual experience.

SOURCES OF TRADE AND REVENUE.

The canal, running nearly parallel with the river through its entire length, necessarily passes through the centre of the fertile grain-growing valley of the Potomac, whose agricultural and manufacturing productions will, in a great measure, be borne upon it to market. Along its line may be created "a water-power surpassing in extent only by that which England and the United States enjoy in common, near the western extreme of the Erie Canal, in the Falls of Niagara." When it is finished to Cumberland, it will be put in direct communication with the trade of the West, and will afford the most eligible and cheapest route to the seaboard, from the vast and populous regions beyond the Allegheny mountains. With a postage, by wagons, of only seventy-three miles and the great national macadamized road, between Cumberland and Brownsville, on the Monongahela, to which steamboats of the largest class now come, the facilities of water communication for freight of every description will be afforded to the States bordering on the Ohio river, and those of the far West who may navigate its waters in conveying their productions to the cities of the Atlantic, or receiving from thence their supplies. From the county of Allegheny also a considerable amount of tonnage will be supplied in iron, fire bricks, cement, lumber, &c.; but by far the most important source of trade relied on, and to grasp which has been the primary and controlling motive in prosecuting the work to its present destination, is the boundless and inappreciable fields of that country. Within a range of from six to twelve miles from the basin of the canal at Cumberland the deposits of bituminous coal of a superior quality are numerous, and, morally speaking, inexhaustible. Those that have been already opened consist of horizontal strata, slightly elevated, and declining towards the valleys, so as to be situated in the best possible manner for self-drainage. According to Professor Silliman, the quantity of coal in that region that is thus situated "is so abundant that it will not be exhausted for centuries. It will be the province of a distant posterity to drain the lower beds by tunnelling, or by the unlimited and unending energy of the steam engine." But the boundless extent of the Allegheny coalfields, as well as the superior quality of the Cumberland coal, are matters so well established now as to render a parade of authorities on the subject in this place superfluous. Such as may desire to pursue the inquiry will find a mass of testimony collected together in the appendix to our special report of the 16th of November, 1843, and new illustrations of its value will be seen by reference to the voluminous and very learned report of Professor Johnson "on American coals applicable to steam navigation and to other purposes," made to the Navy Department in June, 1844, and recently published under an order of the United States Senate. In this last mentioned document, which contains the results of a long series of scientific experiments, it will be found that "in the order of evaporative power under equal weights," "of evaporative power under equal bulks," which is deemed of the highest importance for the purposes of steam navigation, and of the "evaporative power of combustible matter," the Cumberland coal takes rank as number one in a list of thirty-seven different varieties of coal, obtained from various regions in the United States and Great Britain, including the Newcastle, Sidney, Picton, Liverpool, and Scotch coals.

"As a fuel for domestic purposes (according to the report alluded to) it possesses, on the one hand, a flame abundantly sufficient to give cheerfulness to the aspect of a parlor fire, and on the other, a durability approximating that of some of the lighter anthracites; and, as a furnace fuel, it is not only superior to the best of the bituminous class, since, either with or without previous coking, it may be very advantageously employed in the blast furnace."

"Three different sizes of chains were in progress of manufacture at the different periods at which these experiments were made. They can, however, be all reduced to the same size, by a comparison with a common standard sample of coal, which was used on two sizes of chains. Thus Atkinson and Topleman's (Cumberland coal) made eighteen links of a chain one and three-eighths inches in diameter, and eight links of another chain one and sixteen-sixteenths inches in diameter, by the use in each case of fifty pounds of coal. Middleton (new shaft) coal of equal quality was found adequate to the making of fourteen links of a one and three-eighths inch chain; and three Virginia coals, (viz. Crouch & Sneed's, Creek Company's, and Chesterfield Mining Company's) having a mean evaporative power almost identical with the Middleton 'new shaft,' put in nine links of one and three-eighths inch chain."

The following table will exhibit "the relative heating power" of the Cumberland and foreign coals, as tested in making chain-cable, compared with their evaporative powers:

Designation of coals.	Pounds of steam at 212° produced by 1 lb. of coal.	Size of links, diameter in inches.	No. of links made by 60 lb. of coal.	Displaced No. of links of 40 lb. in diam. by 60 lb. in diam.
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